## PERMIT APPLICATION NUMBER: NRS#03.314

APPLICANT: U.S. Fence, Inc.

Office of the Vice President 700 North Main Street Bulls Gap, Tennessee 37711

(423) 235-4113

**LOCATION**: The proposed project is located at Bulls Gap, on an unnamed tributary to the Whitehorn Creek, Hawkins County, Tennessee.

**WATERSHED DESCRIPTION:** Whitehorn Creek is located within the Nolichucky River Watershed. The immediate area of the project is predominantly urban/suburban. The unnamed tributary impacted by the project is a shallow, straightened, predominantly grass-lined channel that was relocated by the applicant several years ago.

**DESCRIPTION:** The applicant is proposing to relocate the normal flow of this unnamed tributary to a constructed channel on the northern side of the project area. Additionally, the applicant is proposing to install a concrete pipe (culvert) where the stream currently flows. Flood flow only would be diverted to this culverted channel. A total of 600 feet of concrete pipe is proposed to be installed.

The proposed new stream channel will begin at the outlet end of the culvert crossing under Highway 66, and continue along the northern property boundary, creating a new stream 1,450 feet long. The proposed relocated channel has been designed and planned to restore the natural channel shape, size, and riparian zone for normal flow to the greatest extent possible with available site conditions. Flood "overflow" will continue in the direction of the existing channel.

The bottom of the new channel will be 2 to 3 feet wide, 1 to 1.5 feet deep and will have side slopes ranging from 3: 1 to 1: 1. Slopes in excess of 2: 1 will be staked with coconut matting to insure their stability. The new stream channel will have an average meander length of 20 feet, and an average belt width of 2 feet.

A flood plain will not be constructed in the new channel, as high flows will be diverted into the proposed culverted channel.

A riparian vegetative zone shall be planted along the new channel. Tree species to be planted shall be a combination of hard wood species. No one species shall comprise more than 25% of the total planted. The trees shall be planted on 10-foot centers on alternating banks. Trees shall be root balled and have a trunk diameter of 1 to 2 inches. They shall be maintained to insure a survival rate of 80% for a five-year period following completion of planting. The project area will be reseeded with annual rye and native warm season grasses.

**PERMIT COORDINATOR:** Dorsey Horne, STATE OF TENNESSEE, Department of Environment and Conservation, Division of Water Pollution Control, 7<sup>th</sup> Floor, L & C Annex, 401 Church Street, Nashville, Tennessee 37243-1534

USGS QUAD: BULLS GAP, TENNESSEE 171-SE

